

19980517.ba v02\_n057.bam.980517

>From ???@??? Mon May 18 03:39:52 1998  
Message-Id: <199805180340.WAA22698@sco.theporch.com>  
Date: Sun, 17 May 1998 22:38:15 CDT  
Subject: BOATANCHORS digest 2057

BOATANCHORS Digest 2057

Topics covered in this issue include:

- 1) Modern Sweepers  
by Scott Robinson <spr@earthlink.net>
- 2) Receivers for sale  
by lema <lema@InfoAve.Net>
- 3) Freebee Radio stuff  
by Edward Zeranski <ejz@nosc.mil>
- 4) Thunderbolt info needed  
by Bob Roehrig <broehrig@admin.aurora.edu>
- 5) Re: modern sweepers, examples?  
by John Kolb <jlkolb@cts.com>
- 6) RE: 60KC alignment  
by "ROBERT W DOWNS, WA5CAB" <RWDowns\_WA5CAB@compuserve.com>
- 7) RE: ID modulation xmfr anyone ?  
by "ROBERT W DOWNS, WA5CAB" <RWDowns\_WA5CAB@compuserve.com>
- 8) Re: What is it?  
by "Larry" <rau@wco.com>
- 9) INFO NEEDED: COLLINS 75S2  
by arc5@ix.netcom.com
- 10) WTB: Gonset 220 mHz Eqpt.  
by w4bld@juno.com (Robert B. Kerby)
- 11) Re: Black beauties  
by "Roberta J. Barmore" <rbarmore@indy.net>
- 12) Heathkit HD-1250  
by "James D. Mayfield" <kb9bnr@revealed.net>
- 13) Z signals  
by "Paul Bernhard Sr." <w2tu@email.msn.com>
- 14) Re: How to Locate Black UGLIES!  
by Henry van Cleef <vancleef@netcom.com>
- 15) R-174 kinda sick  
by "A.B. Bonds" <ab@vuse.vanderbilt.edu>
- 16) Re: Z signals  
by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
- 17) DY-17A/ART-13 DOCUMENTATION  
by "ROBERT W DOWNS, WA5CAB" <RWDowns\_WA5CAB@compuserve.com>
- 18) TUBE ID 8977  
by jackiv@juno.com (John M Iverson)
- 19) Dayton post-mortem

- by Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>
- 20) And the winner is.....  
by "Arden Allen" <gumbear@pacbell.net>
- 21) QST, CQ, 73, magazines for free....  
by "Lawrence R. Ware" <lrware@pipeline.com>
- 22) 60kc alignment  
by ail0@lehigh.edu (ARTHUR I. LARKY)
- 23) Re: Black beauties  
by Ed Tanton <n4xy@att.net>
- 24) someone needed timebase extender for Tek 555  
by John Shriver <jas@shiva.com>
- 25) Re: How to Locate Black UGLIES!  
by Sandy W5TVW <ebjr@worldnet.att.net>
- 26) Re: Black beauties  
by Morris Odell <morriso@vifp.monash.edu.au>
- 27) Re: How to Locate Black UGLIES!  
by Jim Waits <jimwaits@emcst.com>

---

Message-Id: <v03007809b183be3ab8ce@[153.34.29.136]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Date: Sat, 16 May 1998 14:16:21 -0800  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Scott Robinson <spr@earthlink.net>  
Subject: Modern Sweepers

Folks,

My post about tunnel diodes was to fix just such a beast (HP 3100A) for that purpose.

There are a large number of such generators available. New, they cost about \$300-look in Newark under B&K, Goldstar, Tektronix, Leader...in particular the Leader LFG-1300S is a quality piece of gear and has the sweeper built in. I just got a broken one of those from eBay (\$50), and it had the predictable failure in any gear-driven output driver tr\*\*\*\*\*s. In the pre-owned category, look at HP and at Wavetek (there is a Wavetek 111 on eBay right now) as well as the above. Note that while nearly all have a voltage control input only some have the second oscillator built in to do the sweeping. You may need to do a simple mod to get a narrow enough sweep range for crystal filters as the control may not turn down far enough.

I have used function generators to do swept IF alignment including crystal filters for years. They are definitely the right tool for this task.

If using eBay, just search under "function generator." Assume it doesn;t work unless clearly stated otherwise to avoid disappointment. And remember, fixing test equipment is fun, too.

Regards,

Scott Robinson  
spr@earthlink.net

Junque is GOOD for you!

-----  
Date: Sat, 16 May 1998 21:25:40 -0700  
From: lema <lema@InfoAve.Net>  
Subject: Receivers for sale  
To: Old Tube Radios <boatanchors@theporch.com>  
Message-id: <355E66C4.1787@infoave.net>  
MIME-version: 1.0  
Content-type: text/plain; charset=us-ascii  
Content-transfer-encoding: 7bit

I have the following Receivers for sale.

NC-46 with matching speaker - very nice receiver and plays great.  
\$175.00 plus shipping.

NC-183D real nice looking receiver - plays great - \$250.00 plus shipping.

HQ-140-XA Very nice - plays great - \$200 plus shipping.

S-53 1948 vintage with copy of manual \$60.00 plus shipping

S-38D \$50.00 plus shipping

SW-54 Odd color, works good \$40.00 plus shipping

Thanks,

Tom Lemar K4JYH

-----  
Message-Id: <3.0.1.32.19980516085453.006e348c@marlin.nosc.mil>  
Date: Sat, 16 May 1998 08:54:53 -0700  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Edward Zeranski <ejz@nosc.mil>

Subject: Freebee Radio stuff  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I got a phone call last night from the fellow below with some equipment needing a home. I have not seen any of it nor am I familiar with it. Rick really knows WWII fighters!

R101/ARN-6 2ea  
PE94C 1ea  
MR9C Bendix Radio 1ea  
RA10-FA

Rick Flaherty 760-373-8255 rflaherty@ccis.com  
21521 Darrow Drive  
California City, CA  
93505

-----  
Date: Sat, 16 May 1998 21:24:08 -0500 (CDT)  
From: Bob Roehrig <broehrig@admin.aurora.edu>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Thunderbolt info needed  
Message-ID: <Pine.ULT.3.96.980516212305.2721A-100000@admin.aurora.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Anyone got a manual for a Johnson Thunderbolt?

"Nostalgia is a thing of the past"  
E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI  
CIS: Data / Telecom Aurora University, Aurora, IL  
630-844-4898 Fax 630-844-5530

-----  
Date: Sat, 16 May 1998 19:44:43 -0700 (PDT)  
From: John Kolb <jlkolb@cts.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
cc: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: modern sweepers, examples?  
Message-ID: <Pine.SCO.3.91.980516193626.18564A-100000@sd.cts.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sat, 16 May 1998, Arden Allen wrote:

> biggies a la "me too". A function generator is a timeless tool; Iv'e seen

> asking prices of \$100 for old beat up Wavys. What you MUST have on a  
> function generator is an EXTERNAL VOLTAGE CONTROLLED SWEEP INPUT, i. e., an  
> input that allows you to control the output frequency with an external  
> voltage.

On Wavetek function generators, this is called VCG (Voltage Controlled Generator). A 0 to 5V DC signal would sweep the generator from DC to the top freq of whatever range the generator is set to. On the 5K-500K range, the VCG sensitivity would be 100 kHz/Volt, so setting the generator to 455 kHz and applying a +/- 0.1 sine or triangle would sweep the generator +/- 10 kHz.

I have manuals for some of the very old waveteks.

John KK6IL jlkolb@cts.com

-----  
Date: Sun, 17 May 1998 00:49:34 -0400  
From: "ROBERT W DOWNS, WA5CAB" <RWDowns\_WA5CAB@compuserve.com>  
Subject: RE: 60KC alignment  
To: Old Tube Radios <boatanchors@theporch.com>  
Message-ID: <199805170049\_MC2-3D3D-AF32@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: quoted-printable  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Disposition: inline

David & group,

The AN/URM-25 goes down to 10KC, has calibrated output, and =  
modulation. And it's hollow state. They're fairly common  
in surplus. Most military audio sig gens go up to about =  
200 KC, but lack the other features.

73, Robert W. Downs, WA5CAB  
RWDowns\_WA5CAB@compuserve.com  
Houston, TX

-----  
Date: Sun, 17 May 1998 00:49:40 -0400  
From: "ROBERT W DOWNS, WA5CAB" <RWDowns\_WA5CAB@compuserve.com>  
Subject: RE: ID modulation xmfr anyone ?  
To: Old Tube Radios <boatanchors@theporch.com>  
Message-ID: <199805170049\_MC2-3D3D-AF35@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: quoted-printable

Content-Type: text/plain; charset=ISO-8859-1  
Content-Disposition: inline

Lock & group,

As previously mentioned (Meir, WF2U), CZR is Zenith. The =  
part number (677 0002 00) wasn't in my database but is =  
probably Collins. =

For example, the TCS modulation, microphone and receiver =  
output transformers are Collins part numbers 677 2010 00, =  
677 2130 00 and 677 2270 00 respectively. Collins had an =  
alternate form of these part numbers, 677N201, 677N213, etc.

73, Robert W. Downs, WA5CAB  
RWDowns\_WA5CAB@compuserve.com  
Houston, TX

-----  
Message-Id: <199805170522.WAA12963@shell.wco.com>  
From: "Larry" <rau@wco.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Cc: "boatanchors" <boatanchors@theporch.com>  
Subject: Re: What is it?  
Date: Sat, 16 May 1998 22:15:54 -0700  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

this is the original viking messenger 1.. it was made in both the 11 meter  
and 10 meter versions... the 10 meter version is rare... open it up to see  
what frequencys are marked on the ( 3rd overtone type ) chrystals..

this radio should have a built in power supply and you changed from 110  
volt to 6 or 12 volt power ( depending on which one you have ) by changing  
the plug on the back

all the data is in Sam's Photofact CB series between book number 3 and  
number 10...

the radios was made in the early 60's .. it is not capable of 100 %  
modulation...and is in other ways generally a mediocre radio...not owrth  
putting on 10.. worth more as an historical object.

W6WUH

-----  
From: arc5@ix.netcom.com  
Date: Sun, 17 May 1998 08:38:00 -0500 (CDT)  
To: Old Tube Radios <boatanchors@theporch.com>  
Message-Id: <19985178372916334@>  
Subject: INFO NEEDED: COLLINS 75S2  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

Can someone please send me the pin-outs for the  
11-pin connector on the back of a Collins 75S2 receiver?

Also- What is the difference between a 75S1, -S2 and -S3 receivers?

Thanks!

73 DE Dave Stinson AB5S  
arc5@ix.netcom.com

-----  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: WTB: Gonset 220 mHz Eqpt.  
Message-ID: <19980517.092230.5015.0.W4BLD@juno.com>  
From: w4bld@juno.com (Robert B. Kerby)  
Date: Sun, 17 May 1998 09:59:37 EDT

I am looking for anything in the Communicator line that will operate on  
220 mHz. If you can help, please contact me. Many Thanks, Bob

- - - - -  
Robert B. Kerby - w4bld@juno.com  
PO Box 991 ( 231 Rosser Avenue)  
Waynesboro, VA 22980 (540) 942-4356  
Collect: Morrow, Gonset, Elmac

-----  
You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

-----  
Date: Sun, 17 May 1998 09:59:12 -0500 (EST)  
From: "Roberta J. Barmore" <rbarmore@indy.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
cc: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Black beauties

Message-ID: <Pine.SUN.3.96.980517094911.27427B-100000@indy2>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hii, Gang!

On Sun, 17 May 1998, Morris Odell wrote:

> Thanks to all those that commented on the BB capacitors. Now that I know  
> the audiophooles like them, I'm sorry I threw out so many :-)

Well, that notion may be a bit of a canard. While there is some silly stuff in the tube-audiophile press, I've not seen anything suggesting they find \*those\* components desireable.

It is, in my opinion, worth sifting through the chaff of sales-hype and mystical belief to find the true grain--real-world fixed condensers are "non-ideal" components, which is to say none of 'em act exactly like our mathematical models of how they should. Good ones come very close, and some of the ones offered in the audiophile press are very good indeed. Some are just fancy sales talk and exotic materials in search of the uninformed dollar; others are good for audio but not so good for RF; but there's some gems to be found. A little logic will usually serve to tell the silly from the real. (For those who need help, careful reading of the section of Horowitz & Hill's textbook, "The Art of Electronics" that covers precision design will prove useful--they address similar ideas in a sensible manner).

73,  
--Bobbi

-----  
Message-Id: <3.0.32.19980517102919.00bcfa44@revealed.net>  
Date: Sun, 17 May 1998 11:30:00 -0500  
To: Old Tube Radios <boatanchors@theporch.com>  
From: "James D. Mayfield" <kb9bnr@revealed.net>  
Subject: Heathkit HD-1250  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I just bought a Heathkit HD-1250 Dip Meter at Dayton, and I am in need of the manual that covers this unit. If anyone has it I would be more than happy to buy a copy from you. Please drop me a note.

73 Dave

\*\*\*\*\*  
J. Dave Mayfield KB9BNR

<http://home.revealed.net/qste/bnr/kb9bnr.html>



kb9bnr@revealed.net

-----  
From: "Paul Bernhard Sr." <w2tu@email.msn.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Z signals  
Date: Sun, 17 May 1998 12:43:39 -0400  
Message-ID: <0de390345161158UPIMSSMTPUSR02@email.msn.com>

Hi all;

The recent interest in "Z" signals sent me back to my Navy MARS Communications Instructions manual and the annex "C" which contains the operating signals both "Q" and "Z".

It directs the operators to use "Z" signals only in military communications and "Q" sigs in non-military comms or where there is no suitable Z signal. Contrary to amateur practice we do not normally use these signals in voice comms. You should "tell it like it is". Not "your Q5" but you are "loud and clear" or "weak but readable", etc.

The NTP-8(c) contains approximately 19 pages of "Z:" signals from  
ZAB - your speed key is improperly adjusted

to:

ZXY - Transmit this message to "-----"

If anyone needs any particular signal translated, let me know.

Paul Bernhard Sr. W2TU/NNN0GNB

w2tu@msn.com

-----  
From: Henry van Cleef <vancleef@netcom.com>  
Message-Id: <199805171708.KAA02147@netcom8.netcom.com>  
Subject: Re: How to Locate Black UGLIES!  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sun, 17 May 1998 11:08:26 -0600 (MDT)  
Cc: boatanchors@theporch.com  
MIME-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII

Content-Transfer-Encoding: 7bit

As Benjamin D. Hall discourses

>

> At 07:25 PM 1998/05/15 -0500, you wrote:

>

> Beauties? Ha! I've always thought the term "Black Uglies" was a better  
> description... ;) Speaking of those evul things, I've got about 15 of  
> them to pull out of my SA-8b panadaptor, now that I'm almost finished  
> putting together a power cord...

I don't get too hasty to replace old molded caps until I have done an  
electrical inspection. Needless to say, if some of them are split  
open, you can bypass the electrical inspection and start soldering.  
But I have a lot of test equipment with molded caps that works just  
fine.

>

> Anyone else out there with a Panoramic SA-8b? This one has some  
> differences from the manual I've got, including some wierd things like a  
> pilot light that shines onto a neon lamp around the Blocking Oscillator  
> Amplifier...

This is a little trick that foxes a lot of people. Neon bulbs and  
VR glow discharge voltage regulators are notorious for not firing and  
starting their discharge in the dark. Light provides energy that will  
kick off the discharge. Some of these had a little radioactivity  
added when constructed to provide the "kicker" needed to start in the  
dark. The symptoms generally are "works fine on the bench, but  
doesn't work when case/covers are installed." The two NE-2's in the Tek  
530/540-series scope horizontal amplifier circuit (located on the  
right top, a few inches in front of the HV oscillator) are notorious  
for giving this problem.

Diagnosis is fairly easy---run the unit in a dark room (remove pilot  
light bulbs if needed) and see if you get glow when you power up.

>

> 73,

> Ben

> ---

> Benjamin D. Hall, KD5BYB, Engine and radio collector / operator.

> Located in Houston, Texas, USA.

> e-mail: kd5byb@WT.net, web: \*\*\*down for refurbishment\*\*\*

> "An ye harm none, do what ye will."

>

--

=====  
Hank van Cleef  
=====

-----  
Message-Id: <1.5.4.32.19980517171115.0069ca28@mailhost.vuse.vanderbilt.edu>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Date: Sun, 17 May 1998 12:11:15 -0500  
To: Old Tube Radios <boatanchors@theporch.com>  
From: "A.B. Bonds" <ab@vuse.vanderbilt.edu>  
Subject: R-174 kinda sick

Well, I didn't get to go to Dayton, but the Nashville Antique Radio Assn had a swap meet Satiddy mawnin and among other things a nice little R-174 hitched a ride home. The price was very low, and now I know why, 'cuz it's kinda sick. Appears that at least one, if not both, of the selenium stacks is/are fried. There is a small bridge inside used to generate the changeover relay voltage from 11 vac (transformed from 110v. Electrons go in, nothing comes out. There is also a pair of great big selenium panels built into the bottom of the case. Since they are only one stage, I presume they are for high current low voltage (i.e., filaments). My Fluke would indicate virtually no front-to-back resistance differential, but hey, what does a Fluke know about seleniums anyway?

Obviously these are readily replaced by silicon, but I don't have a book on this beast, and expect the output voltages will have to be knocked down a little to compensate for the selenium losses. Sooo...what's the voltage across the changeover relay sposed to be? And has anyone had any experience with replacing those big suckers in the cabinet with modern substitutes?

73

A. B. Bonds

-----  
Message-Id: <199805171821.TAA05089@punt2.hw.ac.uk>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Bill Jarvis <B.H.Jarvis@hw.ac.uk>  
CC: boatanchors <boatanchors@theporch.com>  
Date: Sun, 17 May 1998 19:21:27 +2300  
Subject: Re: Z signals

On 1998-05-17 w2tu@email.msn.com said:

Hi all;

The recent interest in "Z" signals sent me back to my Navy MARS Communications Instructions manual and the annex "C" which contains the operating signals both "Q" and "Z".

It directs the operators to use "Z" signals only in military communications and "Q" sigs in non-military coms or where there is no suitable Z signal. Contrary to amateur practice we do not normally use these signals in voice comms. You should "tell it like it is". Not "your Q5" but you are "loud and clear" or "weak but readable", etc.

The NTP-8(c) contains approximately 19 pages of "Z:" signals from  
ZAB - your speed key is improperly adjusted  
ZXY - Transmit this message to "-----"

If anyone needs any particular signal translated, let me know.  
Paul Bernhard Sr. W2TU/NNN0GNB  
w2tu@msn.com

You might be able to advise, although I have asked this before, without reply (maybe it's just T00 secret?)

## What is ZOXIL ?

I believe that at the end of the affected part of the message, one has to UNZOXIL.

We used it a lot in the military, late 1950s; but only as a spoof for something no-one at all was allowed to know. Much stronger than SNAFU, which everyone knew.

Our station commander once said "Next person heard saying ZOXIL gets three weekends Orderly."

=====

GM8APX, qthr

=====

Edinburgh, Scotland, UK

Eheu, fugaces, Postume, Postume. Labuntur anni, nec pietas etc etc

Net-Tamer V 1.11 - Registered

Date: Sun, 17 May 1998 14:39:00 -0400  
From: "ROBERT W DOWNS, WA5CAB" <RWDowns\_WA5CAB@compuserve.com>  
Subject: DY-17A/ART-13 DOCUMENTATION  
To: Old Tube Radios <boatanchors@theporch.com>  
Message-ID: <199805171439\_MC2-3D40-EF9A@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: quoted-printable

Content-Type: text/plain; charset=ISO-8859-1  
Content-Disposition: inline

Group,

Since 1990, I've supplied DY-17A dynamotors to quite a number of you. With the first lot of 25, I found in a few of the boxes the preliminary T.O. packed with the units by Eicor. I packed a copy of the T.O. with most if=

not all of the first lot, and I think with the second lot of 50 which I bought in 1992. When I purchase the remainder in 1995, I had misplaced the

T.O. copies. I stumbled across some of them this morning in some boxes from my office move in 1996. I'll provide a copy to anyone to whom I sold

a dynamotor. Send me an address label. I'll provide the envelope and the copy. =

Paul B., yours will be in tomorrow's mail. I started to just make up a list and mail one to everyone, but I'm not sure when I quit sending them with the dynamotors, and I already know of one bad address and one SK who would be on the list.

73, Robert W. Downs, WA5CAB  
2027 Mapleton Drive  
Houston, TX 77043

RWDowns\_WA5CAB@compuserve.com

-----  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Sun, 17 May 1998 15:05:38 CDT  
Subject: TUBE ID 8977  
Message-ID: <19980517.150540.7206.0.jackiv@juno.com>  
From: jackiv@juno.com (John M Iverson)

I have an 8977 air cooled power tube, can any of the experts out there help? believe it came from a channel 9 tv tx (bobbie where are you) no it is not in tube lore. mfg is brule, old rca. thanks jack  
Jack Iverson K0EWU jackiv@juno.com

-----  
You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

-----  
Message-Id: <v0310280db184e4c864f4@[134.53.65.12]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Date: Sun, 17 May 1998 15:29:58 -0400  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>  
Subject: Dayton post-mortem

Well, gang, it's over for another year! With one or two exceptions I've made it to Dayton for the past 28 years, and I have to say this one topped them all. I rolled into my flea market space at 7:30 am Friday morning, under blue skies and bright sun. Friday's afternoon temperature hit the high 80's, but it cooled off nicely on Saturday and Sunday. I've never seen so much sunlight, especially in Ohio, where the clouds and drizzle make Seattle seem like the Sahara.

There were boatanchors galore -- 75A1,2,3,4s, Globe Kings, all kinds of Hammarlund receivers, Hallicrafters, National, military gear -- even a BC610 ! I swear I saw every piece of ham gear ever made, on and on and on, acre after acre. I think the entire production run of the S-line was there..

I sold my stuff almost instantly (except for my poor old Ameco T62, which is still looking for a loving home) and spent the rest of the time scrounging for goodies. I picked up a beautiful RME-4350A and matching speaker, and a very clean, loaded Drake C-line that had my name written on it. And then, just as I was heading back to the minivan after one last cruise through the back row, I saw this drop-dead-gorgeous Viking Invader 2000, whose owner was in despair at having to lug it back home. With my fingers crossed, I offered him a low-ball price, and I swear he almost kissed me he was so happy. It is sooo beautiful, not a scratch on it, with the original PL-175As. I can't wait to fire it up.

I made a quick tour inside to see the restored Collins van, which brought back nice memories. Saw a kazillion of my my BA List buddies Here's an idea: why don't we organize a BA List party at next year's Dayton?

So I how do I feel? My feet hurt, my back hurts, I'm dehydrated, sunburned, worn to a frizzle, and the pizza and hot dogs are sitting in my stomach like a bowling ball. I'm a squinty-eyed, achy mess. In other words, I feel great! What an outstanding experience! I wouldn't have traded it for anything.

73,

Jim Garland W8ZR

-----  
Message-Id: <199805172136.0AA29233@mail-gw2.pacbell.net>  
From: "Arden Allen" <gumbear@pacbell.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: And the winner is.....  
Date: Sun, 17 May 1998 14:38:23 -0700  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Fellow Anchor Clankers;

While so many of you have been slugging it out at Dayton and are coming back with a load of trophies and wondering which ones will turn into junkie within the coming year, we stay-at-homes have been hosting another wonderful thread on capacitors (something to keep us from feeling lonely-----speaking for myself of course).

In one of my former lives I spent a lot of time breadboarding analog to digital converter circuits of the dual slope integrating variety. They were based on Intersil's new IC products and we wanted all of the 16 bit performance they were capable of with zilch non-linearity. Intersil's application note on the 7103 A/D converter went about choosing capacitors with appropriate dielectrics for the integrating capacitor to achieve best linearity. I quote from Intersil:

"A very important characteristic of the integrating capacitor is that it has low \*dielectric absorption\* to prevent roll-over or ratiometric errors. A good test for dielectric absorption is to use the capacitor with the (A/D converter's) input tied to the reference (voltage).

"This ratiometric condition should read half scale (i. e.,) 1.0000 (using a 16 bit converter with decimal readout), and any deviation is probably due to dielectric absorption. Polypropylene capacitors give undetectable errors at reasonable cost. Polystyrene and polycarbonate capacitors may also be used in less critical applications"

The "dielectric absorption" referred to is not the absorption of moisture but a euphemism for a mechanism which is probably more accurately termed a \*dielectric relaxation\*, or the storage of a certain amount of energy by the distortion of molecules in the dielectric which then is slowly released which causes the latent charge to appear as an incompletely discharged capacitor after discharge. This causes errors in the range of less than .0001% with polypropylene capacitors and as much as .005% in my experience with other types of film such as Mylar (polyester).

I performed a series of tests on a variety of capacitors from several

manufacturers and found that there was even observable degrees of performance among polypropylene capacitors from different manufacturers. The TRW (since bought out and changed name) capacitors were our first choice because we could see no errors down to the least significant bit. Polystyrene was a good second choice but undesirable because of poor solvent and temperature resistance.

This test method, using an A/D converter, is probably the poor man's definitive test for choosing capacitors for ultra hi-fi applications, IMHO. Polypropylene capacitors are the first choice of our distant cousin "audiophooles" who are in the know and haven't succumbed to their own hype yet.

Now this note may be a bit off topic but I thought it would be of interest to those who restore BA audio equipment and those who are trying to get 0% modulation distortion (good luck). Maybe you could check "Black Uglies" this way too (Hi!).

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

-----  
Message-Id: <3.0.5.32.19980517174125.008305b0@pop.pipeline.com>  
Date: Sun, 17 May 1998 17:41:25 +0000  
To: Old Tube Radios <boatanchors@theporch.com>  
From: "Lawrence R. Ware" <lrware@pipeline.com>  
Subject: QST, CQ, 73, magazines for free....  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

For those of you who didn't get your paper fix at Dayton. :-)

It's Spring cleaning time for my garage, office, and storage space. Unbelievable amounts of junk must go.... :-)

Tonight:  
Must be 40 lbs of magazines and related ham paper.

QST, CQ and 73 from the early 70's to about 1996.  
Mixed, not indexed or sorted.

10 lb lots free to the first four responses,  
you get to pay 4th class book postage, (not much.)

-Larry

# Larry Ware



# Admirer, Collector, Restorer of National Radio Company  
# receivers and other artifacts.  
# Orlando, Florida  
# lrware@pipeline.com

-----  
Message-Id: <199805172359.TAA16106@ns4-1.CC.Lehigh.EDU>  
Date: Sun, 17 May 1998 19:58:55 EDT  
From: ail0@lehigh.edu (ARTHUR I. LARKY)  
Subject: 60kc alignment  
To: Old Tube Radios <boatanchors@theporch.com>

A day or two back I suggested using an audio signal generator such as the Heathkit Sine/Square wave generator to align a 60kc IF. I got to wondering about the quality of my advice so I warmed up my frequency counter for two hours, connected it to my Heath Sine/Square, turned it on and set it to 60.000kc. Within a few minutes after turn-on it was at 59.9996 kc and stayed there for a couple hours. Then I went shopping for flowers with the XYL. When I came back, it was down to 59.9995 kc. My conclusion is that it was a good suggestion.

Art

K3HBA

-----  
Message-Id: <3.0.5.32.19980517202921.00cdd100@postoffice.worldnet.att.net>  
Date: Sun, 17 May 1998 20:29:21 -0400  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Ed Tanton <n4xy@att.net>  
Subject: Re: Black beauties  
Cc: Old Tube Radios <boatanchors@theporch.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

While I have been guilty of looking down my nose about "Monster Wires" and one or two other things the purists may-or may not-be spending their money for (I have read ads for \$4000 amplifier kits @ 20 or 30W stereo output-what idiocy!) there is also a nasty tendency amongst us hams to be snide about them in more ways than exist.

This, I suspect is one of them. They probably do the same thing about us on occasion-and deservedly so, maybe more often than the rare 'once in a while (quads vs yagis, mfgs' gain claims, CCD gain claims... etc. etc.) I personally DO like toob sounds... even if I don't turn my nose up at other types of devices.

Furthermore, I suspect that my fondness for the sounds out of my old HQ-150

Now that said, the rest of the story-as Paul Harvey liked to say-is that I must admit I do LIKE my older rigs better... not so much for operating things, as for the myriad reasons we all find to love and admire in our old radios and their designs. They are a link to an interesting past, and I will always cherish and maintain that linkage-if only for the sheer joy I feel to actively use and enjoy a radio nearly as old as I am.

73

INTERESTS:	QRP	BoatAnchors	Test Equipment	Photography
CW: 99.9%		Mercury Paddle # 0214		QRP to 150W: 95%

"Think you can, think you can't: either way you're right!"      Henry Ford

I exchanged mail in the last few weeks with someone on the list who just acquired a Tektronix 555 and needed an 013-013 timebase extender. Well, I just found one at the MIT flea. Drop me a line and it's yours...

John Shriver  
jas@shiva.com

Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Sandy W5TVW <ebjr@worldnet.att.net>  
Subject: Re: How to Locate Black UGLIES!  
Date: Mon, 18 May 1998 00:49:59 +0000  
Message-ID: <19980518004957.AAA2573@LOCALNAME>

At 11:08 AM 5/17/98 -0600, you wrote:

>This is a little trick that foxes a lot of people. Neon bulbs and  
>VR glow discharge voltage regulators are notorious for not firing and  
>starting their discharge in the dark. Light provides energy that will  
>kick off the discharge. Some of these had a little radioactivity  
>added when constructed to provide the "kicker" needed to start in the  
>dark. The symptoms generally are "works fine on the bench, but  
>doesn't work when case/covers are installed." The two NE-2's in the Tek  
>530/540-series scope horizontal amplifier circuit (located on the  
>right top, a few inches in front of the HV oscillator) are notorious  
>for giving this problem.

>

>Diagnosis is fairly easy---run the unit in a dark room (remove pilot  
>light bulbs if needed) and see if you get glow when you power up.

>

I'm amazed at how many people thought I was crazy when I referred to  
NE-2, NE-68 etc. lamps being "afraid of the dark" when used as gates or  
triggering devices!

I remember a selective calling decoder made for the old 150 mhz.  
mobile telephones by Canadian Marconi. It used cold cathode glow discharge  
subminiature thyratrons. Indespersed between each soldered in tube was  
an NE-2 lamp. These were powered by an inverter that ran from +12 volts.  
The inverter supplied the B+ for the trigger tubes too. They were notorious  
for operating intermittantly, especially when closed up in the cabinet!  
Even with the NE-2 lamps glowing. Variations in temperature (they were usually  
in a hot trunk of a car!) caused erratic operation too. They were a big  
headache.

I like the absolute simplicity of the Western Electric mechanical decoder  
wheel unit instead! It was archaic but reliable! I think it dated back to  
the old

"double bucket" Motorola and Link radio units!

73,

E. V. Sandy Blaize, W5TVW

"Boat Anchors collected, restored, repaired, traded and used!"

417 Ridgewood Drive

Metairie, LA., 70001

\*\*\*Again looking for a Hallicrafters SR-75 \*\*\*

\*\*860 Hartley 'ECO' construction "on hold"\*\*\*  
\*\*\* Looking for a TRC-10 transceiver \*\*\*\*\*  
\*\*\* Looking for an RAL receiver \*\*\*\*\*

-----  
Message-ID: <355F8D4C.E8FCB09E@vifp.monash.edu.au>  
Date: Mon, 18 May 1998 11:22:21 +1000  
From: Morris Odell <morriso@vifp.monash.edu.au>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Black beauties  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi all,

When I wrote:

> Thanks to all those that commented on the BB capacitors. Now that I know  
> the audiophooles like them, I'm sorry I threw out so many :-)

I didn't really expect to be taken so seriously. It was a <joke> for heaven's sake! I must confess to enjoying a bit of a dig at audiophooles from time to time.

It did generate some interesting discussion though, most of which is probably off-topic.

73 de Morris VK3DOC

-----  
Message-ID: <355FAD0B.7AA9E80@emcst.com>  
Date: Sun, 17 May 1998 22:37:47 -0500  
From: Jim Waits <jimwaits@emcst.com>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
CC: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: How to Locate Black UGLIES!  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hello Sandy, All,

I am very familiar with the neon not firing in the dark. Just in the last two weeks

I was showing two knowledgable friends about how an old neon may just blink in the dark. I was staying with a friend and there was a neon lamp in the room which only blinked in the dark. I called both guys in and took a flashlight and demonstrated how the neon would perk up and light bright when just a wee bit

of light was shone on it. Both long time hams and both retired Colonels had never heard of it.

Another friend who was an electronics engineer and had worked for Zenith on the early ultra sonic tv remotes and Motorola designing the sensicon vhf front end for early Motorola VHF receivers. He had a flashing light type depth meter on a small sailboat. The unit would not work at night and my friend was sure it was because the battery voltage would be sagging a bit at night due to the running lights being on. I put the unit on the bench at my place and demonstrated that it only needed a little light to work and would work with the battery way down about 9 volts when light was shined on the neon. He was dumbfounded! Of course a new NE2 cured the problem but surely an old one will not light good in the dark!

I have never ever heard or read anything on this in electronics books! I have been in electronics all my life and been W4ROM for 48 years! I have demonstrated this to many people and all are amazed!

Jim Waits, W4ROM for 47 years Email [jimwaits@emcst.com](mailto:jimwaits@emcst.com)

Home Page <http://www.emcst.com/pub/jimwaits/jimmy.htm>

Fish Camp Owner on Choctawhatchee River at 30-25-50N---85-58-59W  
Mail: 242 Rooks Bluff Rd., Bruce, FL 32455-4216 Phone 850-835-2514

Sandy W5TVW wrote:

> At 11:08 AM 5/17/98 -0600, you wrote:

>

> >This is a little trick that foxes a lot of people. Neon bulbs and  
> >VR glow discharge voltage regulators are notorious for not firing and  
> >starting their discharge in the dark. Light provides energy that will  
> >kick off the discharge. Some of these had a little radioactivity  
> >added when constructed to provide the "kicker" needed to start in the  
> >dark. The symptoms generally are "works fine on the bench, but  
> >doesn't work when case/covers are installed." The two NE-2's in the Tek  
> >530/540-series scope horizontal amplifier circuit (located on the  
> >right top, a few inches in front of the HV oscillator) are notorious  
> >for giving this problem.

> >

> >Diagnosis is fairly easy---run the unit in a dark room (remove pilot  
> >light bulbs if needed) and see if you get glow when you power up.

> >

> I'm amazed at how many people thought I was crazy when I referred to  
> NE-2, NE-68 etc. lamps being "afraid of the dark" when used as gates or  
> triggering devices!

> I remember a selective calling decoder made for the old 150 mhz.  
> mobile telephones by Canadian Marconi. It used cold cathode glow discharge

> subminiature thyratrons. Indespersed between each soldered in tube was  
> an NE-2 lamp. These were powered by an inverter that ran from +12 volts.  
> The inverter supplied the B+ for the trigger tubes too. They were notorious  
> for operating intermittantly, especially when closed up in the cabinet!  
> Even with the NE-2 lamps glowing. Variations in temperature (they were  
> usually  
> in a hot trunk of a car!) caused erratic operation too. They were a big  
> headache.  
> I like the absolute simplicity of the Western Electric mechanical decoder  
> wheel unit instead! It was archaic but reliable! I think it dated back to  
> the old  
> "double bucket" Motorola and Link radio units!  
>  
> 73,  
> E. V. Sandy Blaize, W5TVW

Jim Waits, W4ROM for 47 years           Email   jimwaits@emcst.com  
Home Page   <http://www.emcst.com/pub/jimwaits/jimmy.htm>  
Fish Camp Owner on Choctawhatchee River at 30-25-50N----85-58-59W  
Mail: 242 Rooks Bluff Rd., Bruce, FL 32455-4216 Phone 850-835-2514

-----  
End of BOATANCHORS Digest 2057  
\*\*\*\*\*